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| 10/687,733 | 10/16/2003 | Sung Tai Jung | 02598/0200142-US0 | 3285 |
| 7278 | 7590 | 11/24/2006 | EXAMINER | |
| DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257 | | | CHOW, CHARLES CHIANG | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2618 | |

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,733

Applicant(s)

JUNG ET AL.

Examiner

Charles Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-8, 15-17 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) 1-3, 9-14, 18-25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-8, 15-17 and 29-31 is/are allowed.
- 6) ☒ Claim(s) 26 is/are rejected.
- 7) ☒ Claim(s) 27 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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Detailed Action

Claim Objections

1. Claim 16 is objected to because of the following informalities:

In last line of claim 16, still a typographical error "_" after 180. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 26 is rejected under 35 U.S.C. 102(e) as being anticipated by Kfoury (US 6,549,789 B1).

For claim 26, Kfoury teaches a cellular phone providing wireless communication

[the cellular radio telephone for wireless communication, in Fig. 1, col. 3, lines 52-54],
comprising

a main body [first housing 202] having a key pad [keypads in Fig. 2] and a hinge [214 in Fig. 2-4] thereof in a folding and unfolding axis [the folding & unfolding 302 in Fig. 3, col. 5, lines 46-61 & col. 5, line 65 to col. 6, line 11];

a folder [204] having a display [user interface 212] displaying data received from the main body [first, main, housing 202];

a rotation unit [swivel 214, Fig. 2-4] having one end coupled to the folder [204] and the other end coupled to an inside of the hinge in a rotation axis [304, Fig. 3] perpendicular to the folding and unfolding axis [rotating axis 304 is perpendicular to folding & unfolding axis

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302, perpendicular in abstract] to allow the folder to be folded and unfolded with respect to the main body [col. 5, lines 46-61 & col. 5, line 65 to col. 6, line 11], and

manually rotating the folder [second housing 204 is rotated to a second rotating position, col. 5, lines 25-29; col. 6, lines 1-11] with respect to the main body [202] according to a user selection when the folder is in an open state [col. 5, lines 12-29].

Allowable Subject Matter

3. The following is an examiner's statement of reasons for allowance:

Claim 4-8, 15-17, 29-31 are allowable, over the prior art of record. The prior arts fail to teach the allowable features, singly, particularly, or in combination, for the feature in independent claims 4, 15, 29, for

a power transmission unit and a rotation controller coupled to the power transmission unit, disposed in a housing installed at hinge of the main body in a rotating **axis perpendicular to the folding and unfolding axis to automatically rotate the folder** with respect to the main body;

wherein the power transmission comprises **a pair of bevel gears; further comprises a fixed member**, wherein the fixed member comprises a **washer, and a snap ring** [in independent **claim 4**];

the prior arts fail to teach the further comprising the features for, wherein the rotation termination detecting unit comprises: at least one fixed terminal disposed on the power transmission unit; and a rotation terminal disposed on the folder to correspond to the fixed terminal, and **rotating together with the folder**, and detecting the termination of the rotation of the folder when the rotation terminal correspond to the fixed terminal [in independent **claim 15**];

the prior arts fail to teach the features for, **a third portion coupled to transmit a driving force between the first portion and the second portion to rotate the folder in first and second direction about a rotation axis perpendicular to the folding and unfolding axis with respect to the main body** [in independent **claim 29**].

The dependent claims 5-8, 16-17, 30-31 are also allowable due to their dependency upon the independent claims and the having additional claimed features.

The closest prior art **Hunag (US 2004/0062,171 A1)** teaches an optical disk device in Fig. 4, having a motor 23 coupled to the gears 223, 224 for opening, closing, the cover 1 which has position sensing front, rear post 113, 114 to contact switch 41 for the motor driving force control, but fails to teach the rotation of the folder about a rotation axis perpendicular to the folding and unfolding axis, with respect to the main body, above.

Barnett (US 2004/0045,131 A1) teaches a mobile station 10 having the hinge assembly 28 [Fig. 1-10, abstract] for manually rotate, swivel, twist, the display cover 16 around multiple transversely extending axes & longitudinally extending axis, but fails to teach the motor driving force for rotating folder about a rotation axis perpendicular to the folding and unfolding axis with respect to the main body, above.

Other prior arts in below has been considered, but they fail to teach the above allowable features.

Kfoury (US 6,549,789 B1) teaches the user interface 212 can be rotated about an axis which is perpendicular to the folding, unfolding axis, but fails to teach the display, third portion, the motor driving force for rotating folder about a rotation axis perpendicular to the folding and unfolding axis with respect to the main body, above.

Till (US 6,374,089 B1) teaches the motor 50 [Fig. 1-3] for rotation the cover 20 [abstract, col. 1, line 49 to col. 2, line 31], but fails to teach the above allowable features.

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Atsushi (JP 2003-056,545) teaches the motor driven hinge for rotating cover display [Fig. 1-5, (57) abstract], but fail to teach above allowable features.

Other prior arts are considered. They are: Kato et al. (US 6,175,990 B1), Tanaka (US 2004/0189,856 A1), Cheon (US 6,484,016 B1), Park et al. (US 2005/0192,066 A1), Kim (US 2005/0160,558 A1), Moon (US 6,275,376 B1), Murry et al. (US 6,353,733 B1), Fujita (US 6,115,886).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims Objection

4. Claims 27-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior arts fails to teach the additional features in claim 27, 28, for the rotation unit comprises a motor fixedly coupled to the folder and a rotation shaft controller to be coupled to a shaft of the motor, rotation shaft controller comprises a male cam, a female cam, and an elastic member disposed below the female cam, for the associated function.

Other prior arts are also considered. They are in above from **Kato et al. to Fujita**.

Conclusion

5. Regarding claim 26, **Kfoury (US 6,549,789 B1)** teaches the manually rotates the folder with respect to the main body [Fig. 1-4]. Kfoury teaches the manually rotating of a second housing 204, to a second rotating position [col. 5, lines 25-29; col. 5, lines 46-61; col. 5, line 65 to col. 6, line 11], for a cellular radio telephone [col. 3, lines 52-54, Fig. 1-2], having a


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swivel hinge 214 in Fig. 4, rotating axis 304 is perpendicular to the folding & unfolding axis 302 [Fig. 3, abstract].

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (571) 272-7889. The examiner can normally be reached on 8:00am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Chow 

November 14 2006.


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